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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,558	10/14/2003	W. Todd Daniell	190250-1610	4932
38823 7590 01/02/2008 THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP/ AT&T Delaware Intellectual Property, Inc. 600 GALLERIA PARKWAY, S.E. SUITE 1500 ATLANTA, GA 30339-5994			EXAMINER PHAN, TUANKHANH D	
			ART UNIT 2153	PAPER NUMBER
			MAIL DATE 01/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/685,558		DANIELL ET AL.	
	Examiner		Art Unit	
	TuanKhanh Phan		2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/14/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 9-14 is objected to because the limitation "configured to" of the claims to perform a function are not positive limitations but only require the ability to so perform. In the interest of expedited prosecution, the Examiner would like to note that claims 9-14 use functional language to describe claims elements. For example, the terms "configured to" raise questions as to the limiting effect of the functional language that follows them. The Examiner recommends amending the claims to contain positive recitations of the actions performed by the claims elements, rather than merely stating that the elements are "configured to" perform some future act. In the event that a hardware element is intended to contain software, which when executed, causes the hardware element to perform a function, the language of the claim should clearly express that relationship. See MPEP 211.04.

In the interest of expedited prosecution, all of these limitations have been rejected below, but Applicant is encouraged to amend the system/apparatus claims so that the claimed functions are positively recited, to ensure that those limitations may be given patentable weight.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The specification does not provide a definition for "phonetic equivalent" or disclose how to generate one. The limitation "phonetic equivalent" is a relative term

since we are unsure how similar the words must sound to be phonetically "equivalent."

There is no guidance given by Applicant to make the determination.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9-20 are rejected because the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material (software) *per se*, specification page 22.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-9 and 11-15 are rejected under 35 U.S.C. 103(a) unpatentable over Horvitz et al. (US Pat. 6,161,130), hereinafter Horvitz, in view of Addison et al. (US Pub 2003/0144842), hereinafter Addison.

rejected under 35 U.S.C. 103(a) as being unpatentable over Horvitz in view of Sahami et al. (A Bayesian approach to Filtering Junk E-mail), hereinafter Sahami.

Regarding claims 1, 8-9 & 15, Horvitz teaches a method comprising the steps of: receiving an email message having a word (i.e. receiving incoming message stream, abstract);

tokenizing the phonetic equivalent of the word to generate a token representative of the phonetic equivalent (i.e. tokenizing to as words, letters, and other character strings, col. 11, ll. 55-65); and

determining a spam probability from the generated token (col. 8, ll. 55-67; col. 13, ll. 5-15).

but does not explicitly disclose generating a phonetic equivalent of the word (i.e. breaking each input message into its constituent tokens, col. 11, ll. 48-56);

However, in the same field of generating phonetic words, Addison disclose generating a phonetic equivalent of the word (¶ [0011], phonetically parsed using phonetic parsing rule).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate determining a spam probability taught by Horvitz into generating token phonetic words taught by Addison to filter text and the sequence in response to the context and changes manipulated by spammers.

Regarding claims 4, 11 and 17, Horvitz in view of Addison further teaches the method of claims 1, 9 and 15, wherein the step of determining the spam probability comprises the steps of: assigning a spam probability value to the token; and generating a Bayesian probability value using the spam probability value assigned to the token (Horvitz, col. 8, ll. 63-67; col. 13, ll. 10-15).

Regarding claims 5, 12 and 18, Horvitz in view of Addison teaches the method of claims 4, 11 and 17, wherein the step of determining the spam probability further comprises the step of: comparing the generated Bayesian probability value with a predefined threshold value (Horvitz, abstract).

Regarding claims 6, 13 and 19, Horvitz in view of Addison further teaches the method of claims 5, 12 and 18, wherein the step of determining the spam probability further comprises the step of: categorizing the email message as spam in response to the Bayesian probability value being greater than the predefined threshold (Horvitz, col. 13, ll. 60-67).

Regarding claims 7, 14 and 20, Horvitz in view of Addison further teaches the method of claims 5, 12 and 18, wherein the step of determining the spam probability further comprises the step of: categorizing the email message as non-spam in response to the Bayesian probability value being not greater than the predefined threshold (Horvitz, col. 13, ll. 60-67).

Claims 2-3, 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvitz in view of Addison, and in further view of Sahami et al. (A Bayesian approach to Filtering Junk E-mail), hereinafter Sahami.

Regarding claims 2, 10 and 16, Horvitz in view of Addison teaches the method of claims 1, 9 and 15, wherein the step of generating the phonetic equivalent of the word comprises the steps of: identifying a string of characters, the string of characters including a non-alphabetic characters (col. 11, ll. 55-65, punctuation mark or the like; col. 8, line 20-30. non-word distinctions); and

While Horvitz teaches removing all features that appear less times, Horvitz in view of Addison do not explicitly teach removing the non-alphabetic character from the string of characters. However, in the same field of endeavor, Sahami shows removing the non-alphabetic character (non-alphanumeric characters, Figure 2) from the string of characters (eliminate words/strings that having little resolving power in email; p. 3 col. ¶ 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the disclosure of Horvitz in view of Addison with that of Sahami to uniquely reduce the features set for comparison to improve message spam identifications.

Regarding claim 3, Horvitz in view of Addison and further in view of Sahami teach the method of claim 2, wherein the step of removing the non-alphabetic character comprises the step of: locating a non-alphabetic character within the string of characters, the non-alphabetic character (non-alphanumeric characters [Sahami, Figure 2] or punctuation marks or the like [Horvitz, col. 8, ll. 20-30] encompasses all the character strings below) being at least one selected from the group consisting of: " (quote); ` (single quote); ! (exclamation mark); @ (at); # (pound); \$ (dollar); % (percent); [circumflex over ()] (caret); & (ampersand); * (asterisk); ((open parenthesis);) (close parenthesis); .sub.-- (underscore); - (hyphen); + (plus); = (equal); .backslash. (backslash); / (slash); ? (question mark); (space); (tab); [(open square bracket);] (close square bracket); [(open bracket);] (close bracket); < (less than); > (greater than); , (comma); : (colon); ; (semi-colon); and . (period).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gordon et al. US Pat. 6,732,157. Gordon et al. disclose a comprehensive anti-spam system, method, and computer program product for filtering unwanted e-mail messages.

Shipp US Pub. 2004/0093384. Shipp discloses a method of, and system for, processing email in particular to detect unsolicited bulk email.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to TuanKhanh Phan whose telephone number is 571-270-3047. The examiner can normally be reached on Mon to Fri, 8:00am to 4:30pm EST, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TKP


THU HA NGUYEN
PRIMARY EXAMINER